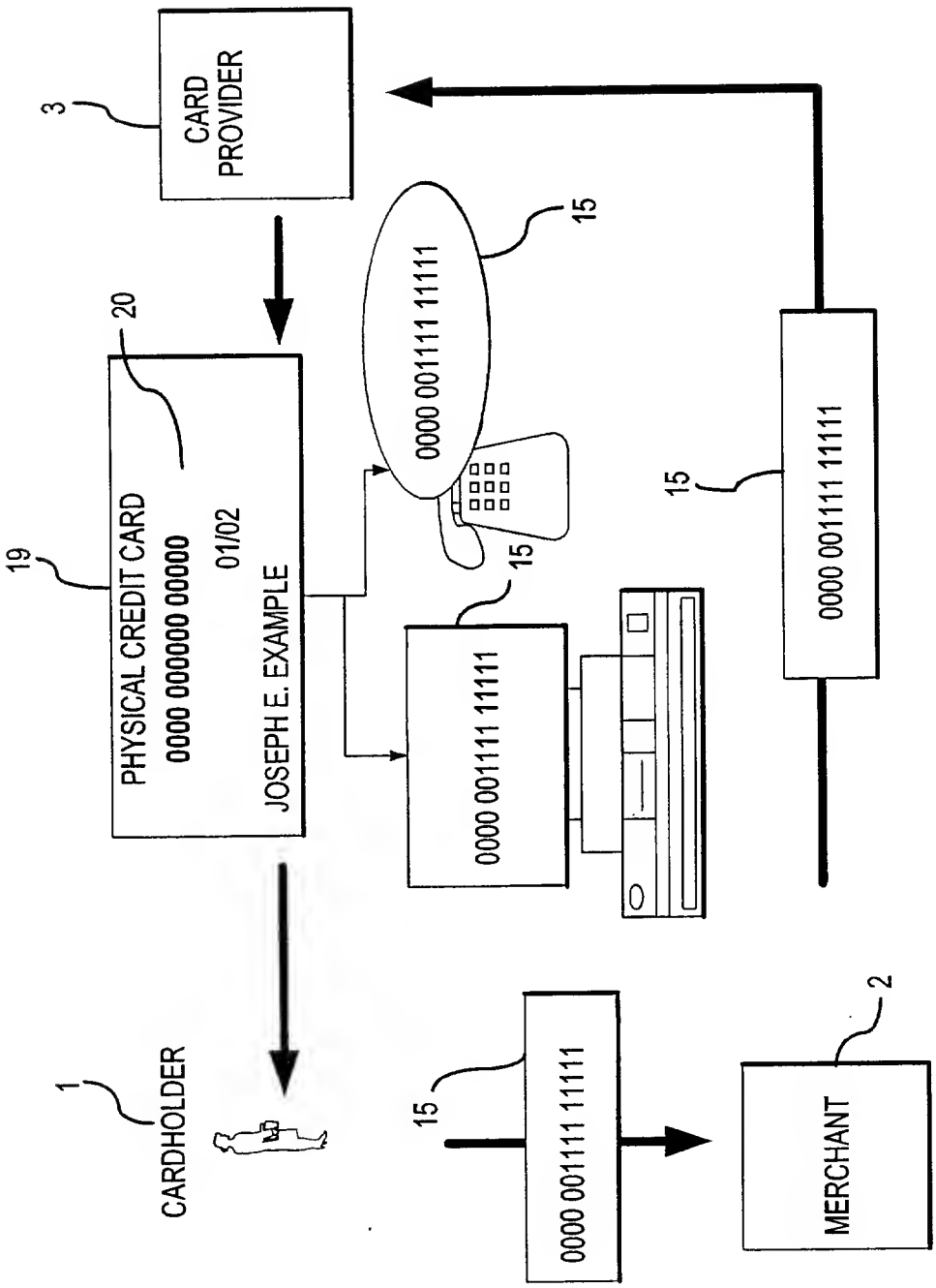
3
CARD PROVIDER
20
19
PHYSICAL CREDIT CARD
0000 000000 00000
01/02
JOSEPH E. EXAMPLE
15
0000 001111 11111
15
0000 001111 11111
15
0000 001111 11111
15
0000 001111 11111
1
CARDHOLDER
2
MERCHANT

FIG.1

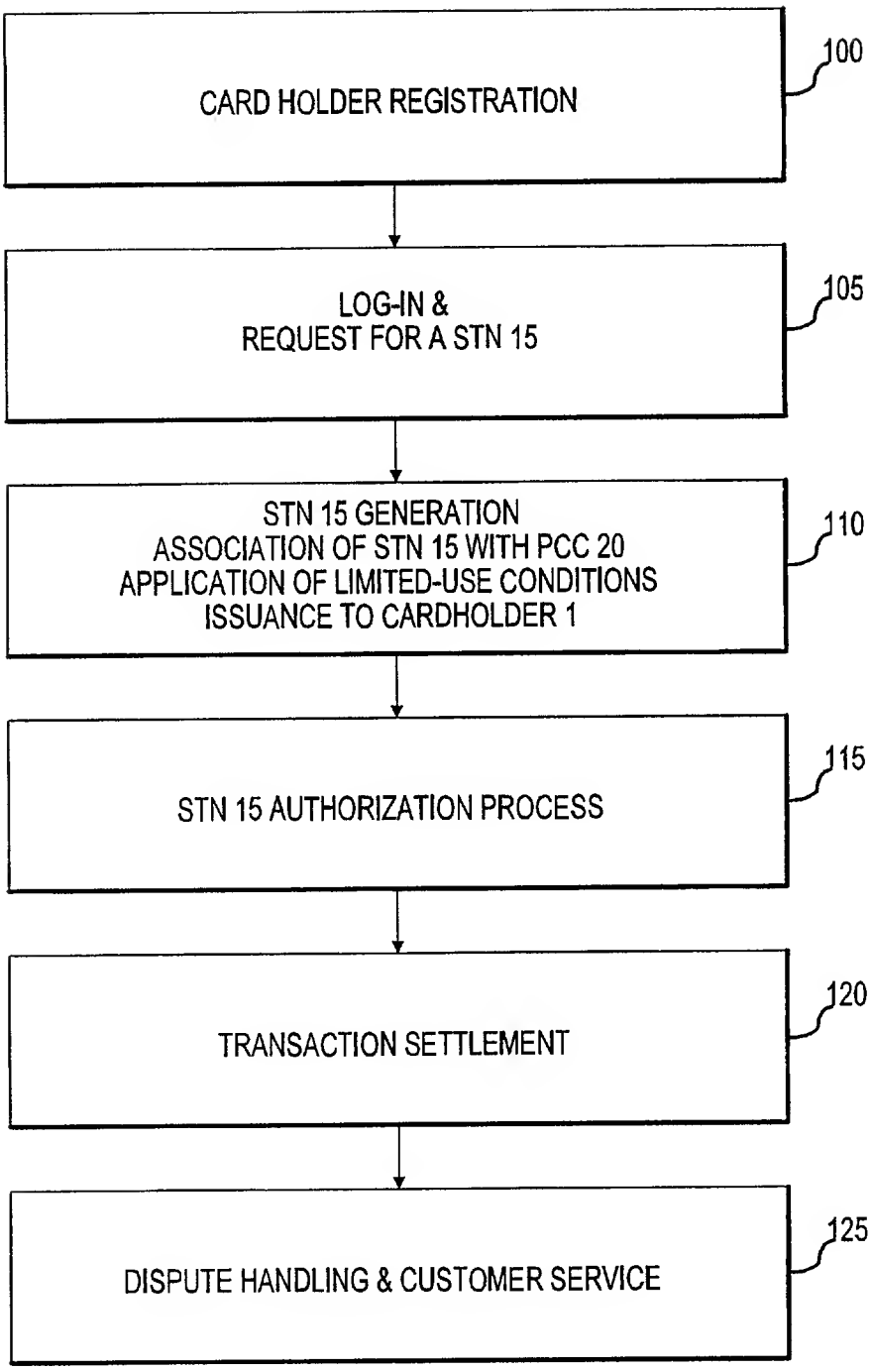
CARD HOLDER REGISTRATION
100
LOG-IN &
REQUEST FOR A STN 15
105
STN 15 GENERATION
ASSOCIATION OF STN 15 WITH PCC 20
APPLICATION OF LIMITED-USE CONDITIONS
ISSUANCE TO CARDHOLDER 1
110
STN 15 AUTHORIZATION PROCESS
115
TRANSACTION SETTLEMENT
120
DISPUTE HANDLING & CUSTOMER SERVICE
125

FIG. 2

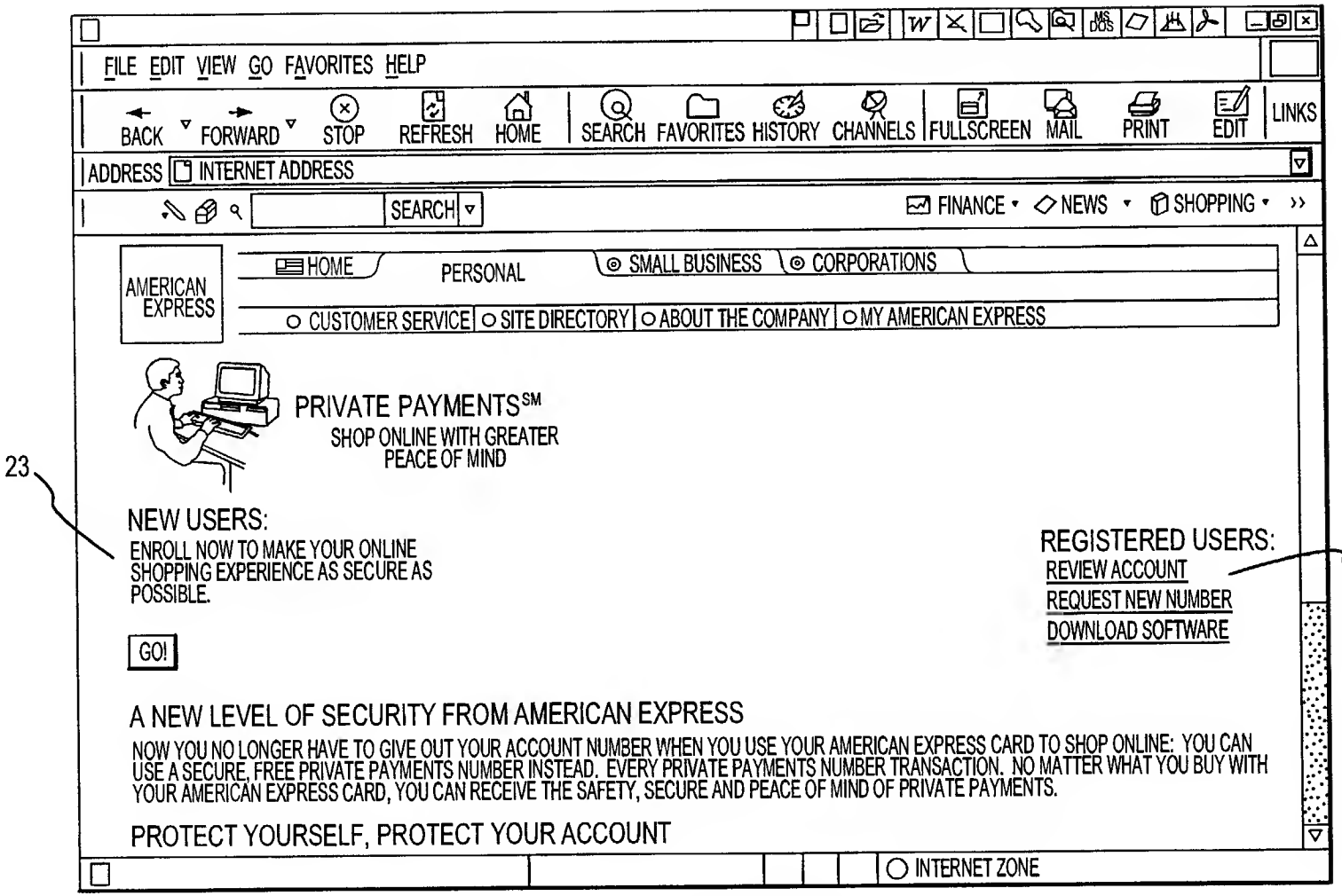
FILE EDIT VIEW GO FAVORITES HELP
BACK FORWARD STOP REFRESH HOME SEARCH FAVORITES HISTORY CHANNELS FULLSCREEN MAIL PRINT EDIT LINKS
ADDRESS INTERNET ADDRESS
SEARCH
FINANCE NEWS SHOPPING
AMERICAN EXPRESS
HOME
PERSONAL
SMALL BUSINESS
CORPORATIONS
CUSTOMER SERVICE
SITE DIRECTORY
ABOUT THE COMPANY
MY AMERICAN EXPRESS
PRIVATE PAYMENTS℠
SHOP ONLINE WITH GREATER PEACE OF MIND
23
NEW USERS:
ENROLL NOW TO MAKE YOUR ONLINE SHOPPING EXPERIENCE AS SECURE AS POSSIBLE.
GO!
REGISTERED USERS:
REVIEW ACCOUNT
REQUEST NEW NUMBER
DOWNLOAD SOFTWARE
25
A NEW LEVEL OF SECURITY FROM AMERICAN EXPRESS
NOW YOU NO LONGER HAVE TO GIVE OUT YOUR ACCOUNT NUMBER WHEN YOU USE YOUR AMERICAN EXPRESS CARD TO SHOP ONLINE: YOU CAN USE A SECURE, FREE PRIVATE PAYMENTS NUMBER INSTEAD. EVERY PRIVATE PAYMENTS NUMBER TRANSACTION. NO MATTER WHAT YOU BUY WITH YOUR AMERICAN EXPRESS CARD, YOU CAN RECEIVE THE SAFETY, SECURE AND PEACE OF MIND OF PRIVATE PAYMENTS.
PROTECT YOURSELF, PROTECT YOUR ACCOUNT
INTERNET ZONE

FIG.3

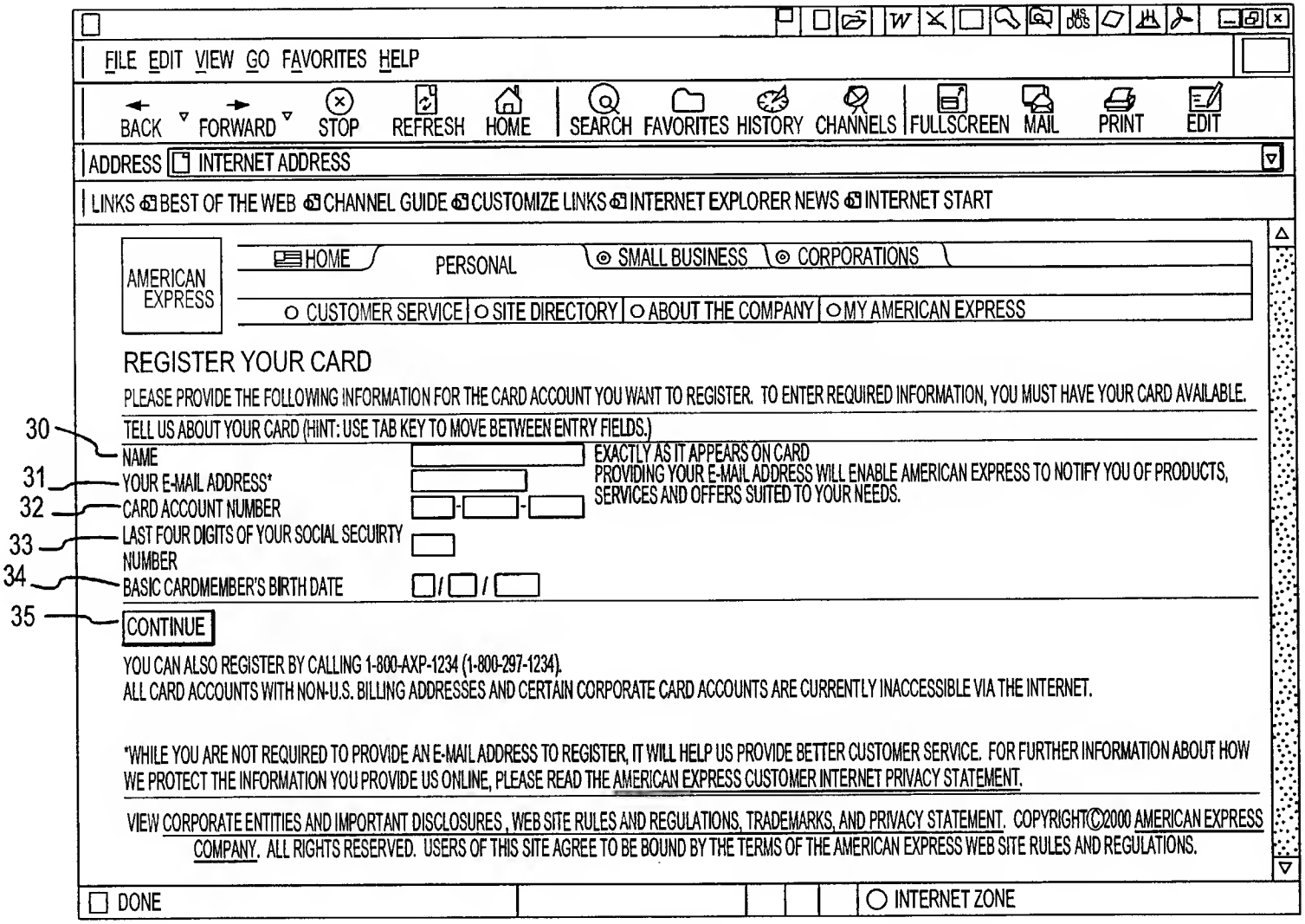
FILE EDIT VIEW GO FAVORITES HELP
BACK FORWARD STOP REFRESH HOME SEARCH FAVORITES HISTORY CHANNELS FULLSCREEN MAIL PRINT EDIT
ADDRESS INTERNET ADDRESS
LINKS BEST OF THE WEB CHANNEL GUIDE CUSTOMIZE LINKS INTERNET EXPLORER NEWS INTERNET START
AMERICAN EXPRESS
HOME
PERSONAL
SMALL BUSINESS
CORPORATIONS
CUSTOMER SERVICE
SITE DIRECTORY
ABOUT THE COMPANY
MY AMERICAN EXPRESS
REGISTER YOUR CARD
PLEASE PROVIDE THE FOLLOWING INFORMATION FOR THE CARD ACCOUNT YOU WANT TO REGISTER. TO ENTER REQUIRED INFORMATION, YOU MUST HAVE YOUR CARD AVAILABLE.
TELL US ABOUT YOUR CARD (HINT: USE TAB KEY TO MOVE BETWEEN ENTRY FIELDS.)
30
NAME
EXACTLY AS IT APPEARS ON CARD
31
YOUR E-MAIL ADDRESS*
PROVIDING YOUR E-MAIL ADDRESS WILL ENABLE AMERICAN EXPRESS TO NOTIFY YOU OF PRODUCTS, SERVICES AND OFFERS SUITED TO YOUR NEEDS.
32
CARD ACCOUNT NUMBER
33
LAST FOUR DIGITS OF YOUR SOCIAL SECURITY NUMBER
34
BASIC CARDMEMBER'S BIRTH DATE
35
CONTINUE
YOU CAN ALSO REGISTER BY CALLING 1-800-AXP-1234 (1-800-297-1234).
ALL CARD ACCOUNTS WITH NON-U.S. BILLING ADDRESSES AND CERTAIN CORPORATE CARD ACCOUNTS ARE CURRENTLY INACCESSIBLE VIA THE INTERNET.
*WHILE YOU ARE NOT REQUIRED TO PROVIDE AN E-MAIL ADDRESS TO REGISTER, IT WILL HELP US PROVIDE BETTER CUSTOMER SERVICE. FOR FURTHER INFORMATION ABOUT HOW WE PROTECT THE INFORMATION YOU PROVIDE US ONLINE, PLEASE READ THE AMERICAN EXPRESS CUSTOMER INTERNET PRIVACY STATEMENT.
VIEW CORPORATE ENTITIES AND IMPORTANT DISCLOSURES , WEB SITE RULES AND REGULATIONS, TRADEMARKS, AND PRIVACY STATEMENT. COPYRIGHT©2000 AMERICAN EXPRESS COMPANY. ALL RIGHTS RESERVED. USERS OF THIS SITE AGREE TO BE BOUND BY THE TERMS OF THE AMERICAN EXPRESS WEB SITE RULES AND REGULATIONS.
DONE
INTERNET ZONE

FIG.4

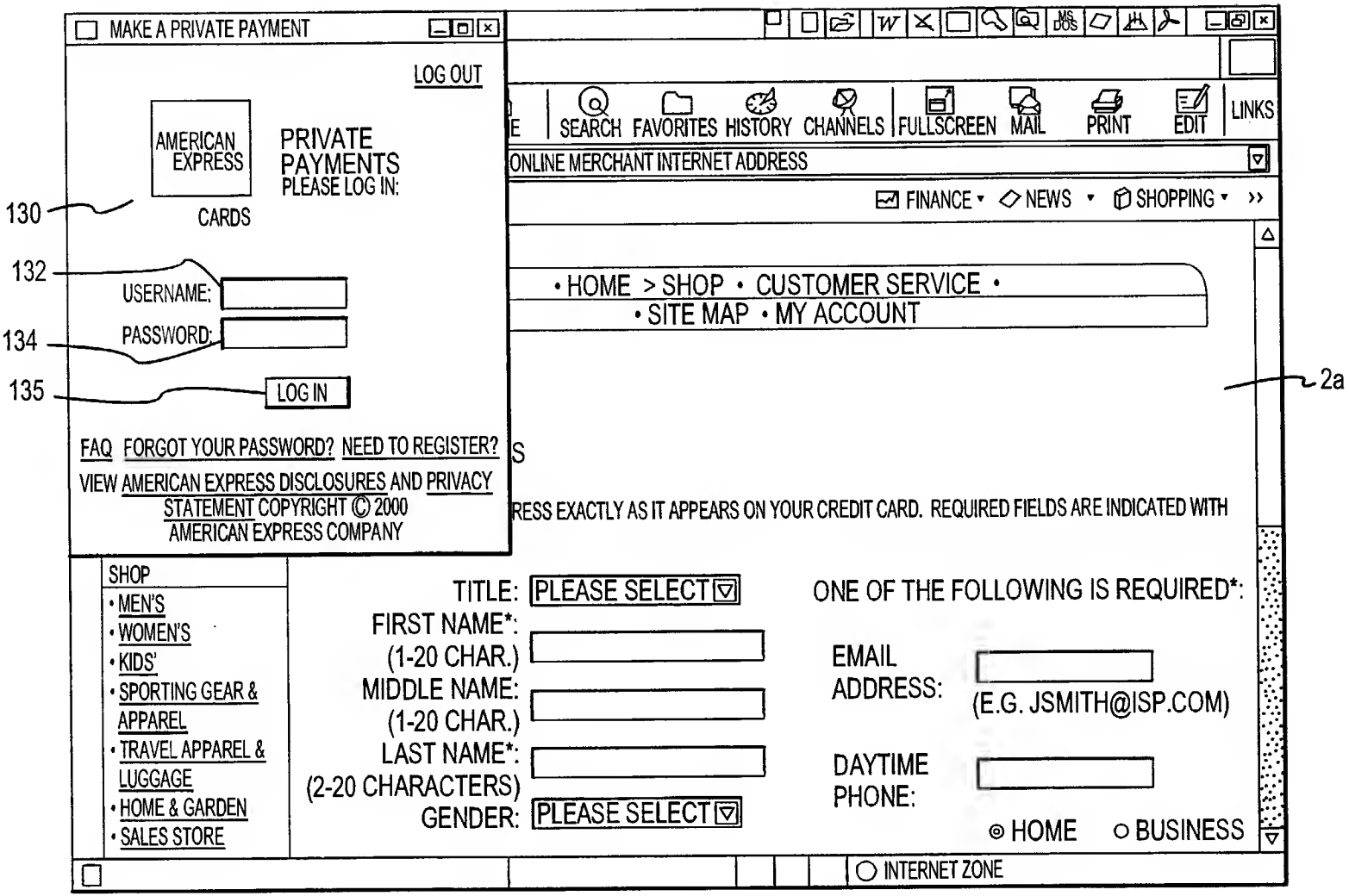
MAKE A PRIVATE PAYMENT
LOG OUT
AMERICAN EXPRESS
CARDS
PRIVATE PAYMENTS
PLEASE LOG IN:
130
132
USERNAME:
134
PASSWORD:
135
LOG IN
FAQ FORGOT YOUR PASSWORD? NEED TO REGISTER?
VIEW AMERICAN EXPRESS DISCLOSURES AND PRIVACY STATEMENT COPYRIGHT © 2000 AMERICAN EXPRESS COMPANY
SEARCH FAVORITES HISTORY CHANNELS FULLSCREEN MAIL PRINT EDIT LINKS
ONLINE MERCHANT INTERNET ADDRESS
FINANCE NEWS SHOPPING
• HOME > SHOP • CUSTOMER SERVICE •
• SITE MAP • MY ACCOUNT
2a
RESS EXACTLY AS IT APPEARS ON YOUR CREDIT CARD. REQUIRED FIELDS ARE INDICATED WITH
SHOP
• MEN'S
• WOMEN'S
• KIDS'
• SPORTING GEAR & APPAREL
• TRAVEL APPAREL & LUGGAGE
• HOME & GARDEN
• SALES STORE
TITLE: PLEASE SELECT
FIRST NAME*: (1-20 CHAR.)
MIDDLE NAME: (1-20 CHAR.)
LAST NAME*: (2-20 CHARACTERS)
GENDER: PLEASE SELECT
ONE OF THE FOLLOWING IS REQUIRED*:
EMAIL ADDRESS:
(E.G. JSMITH@ISP.COM)
DAYTIME PHONE:
HOME BUSINESS
INTERNET ZONE

FIG.5

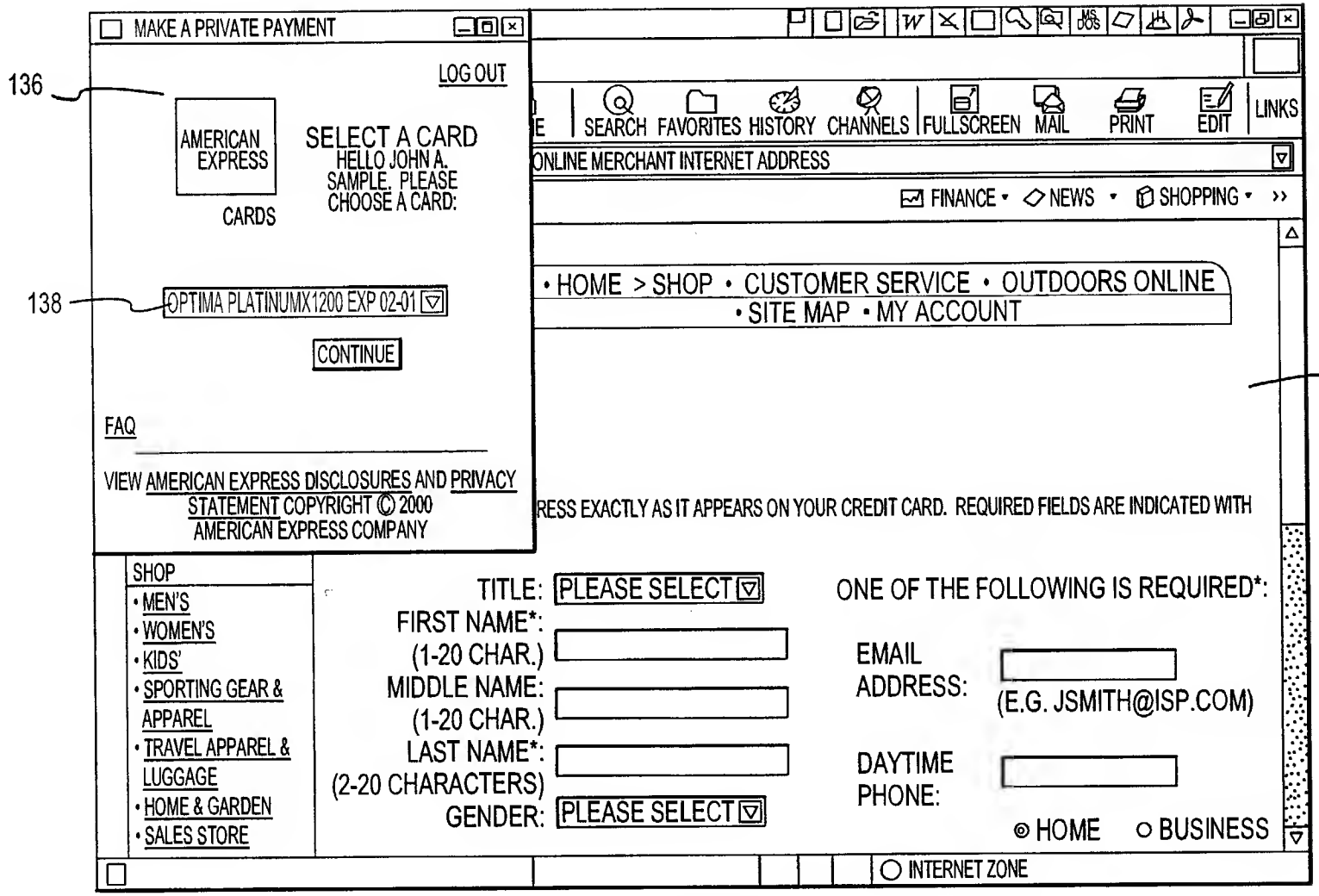
MAKE A PRIVATE PAYMENT
LOG OUT
136
AMERICAN EXPRESS
CARDS
SELECT A CARD
HELLO JOHN A. SAMPLE. PLEASE CHOOSE A CARD:
138
OPTIMA PLATINUMX1200 EXP 02-01
CONTINUE
FAQ
VIEW AMERICAN EXPRESS DISCLOSURES AND PRIVACY STATEMENT COPYRIGHT © 2000 AMERICAN EXPRESS COMPANY
SEARCH FAVORITES HISTORY CHANNELS FULLSCREEN MAIL PRINT EDIT LINKS
ONLINE MERCHANT INTERNET ADDRESS
FINANCE NEWS SHOPPING
• HOME > SHOP • CUSTOMER SERVICE • OUTDOORS ONLINE
• SITE MAP • MY ACCOUNT
2a
RESS EXACTLY AS IT APPEARS ON YOUR CREDIT CARD. REQUIRED FIELDS ARE INDICATED WITH
SHOP
• MEN'S
• WOMEN'S
• KIDS'
• SPORTING GEAR & APPAREL
• TRAVEL APPAREL & LUGGAGE
• HOME & GARDEN
• SALES STORE
TITLE: PLEASE SELECT
FIRST NAME*: (1-20 CHAR.)
MIDDLE NAME: (1-20 CHAR.)
LAST NAME*: (2-20 CHARACTERS)
GENDER: PLEASE SELECT
ONE OF THE FOLLOWING IS REQUIRED*:
EMAIL ADDRESS: (E.G. JSMITH@ISP.COM)
DAYTIME PHONE:
HOME BUSINESS
INTERNET ZONE

FIG.6

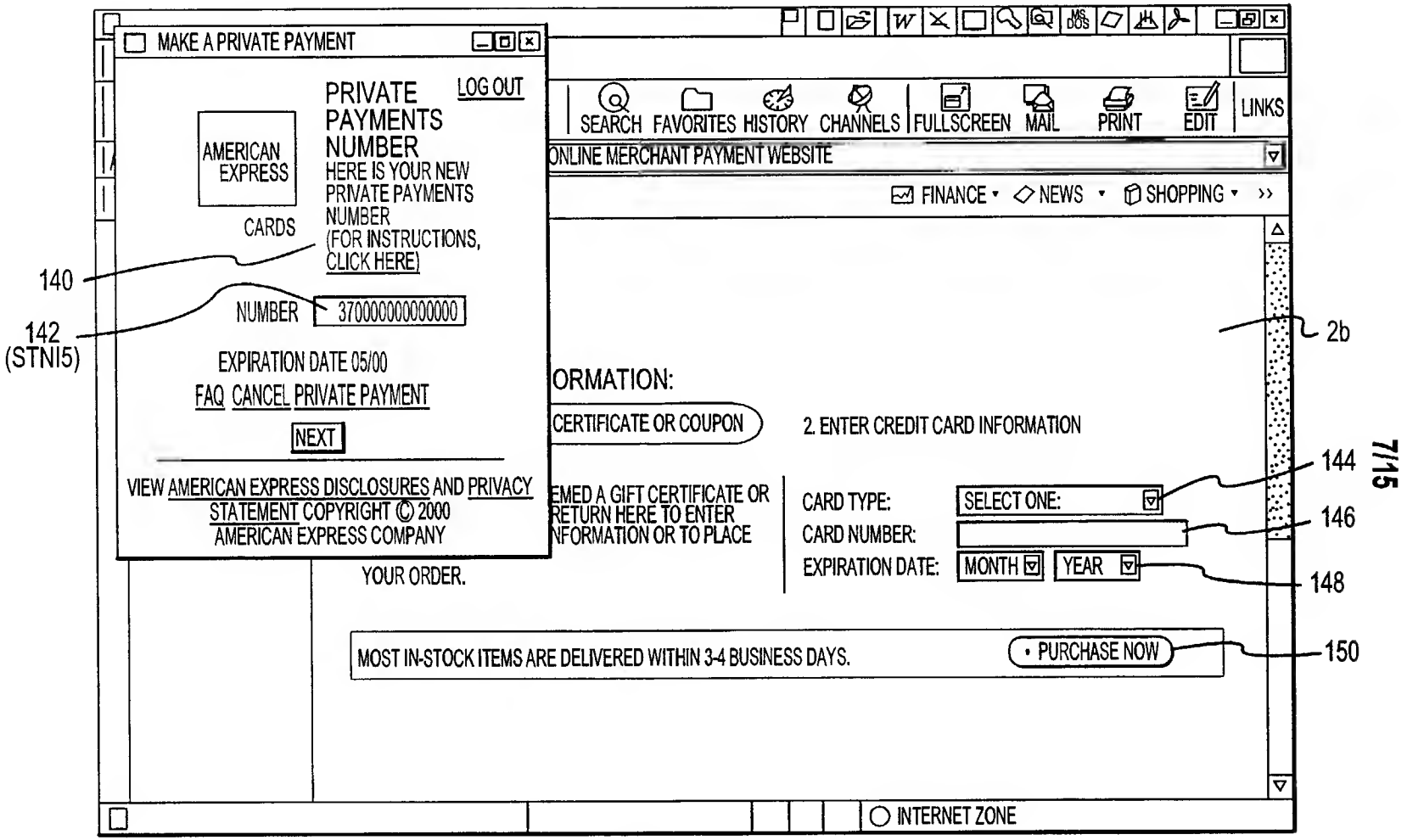
MAKE A PRIVATE PAYMENT
PRIVATE PAYMENTS NUMBER
LOG OUT
AMERICAN EXPRESS CARDS
HERE IS YOUR NEW PRIVATE PAYMENTS NUMBER
(FOR INSTRUCTIONS, CLICK HERE)
140
NUMBER 370000000000000
142 (STNI5)
EXPIRATION DATE 05/00
FAQ CANCEL PRIVATE PAYMENT
NEXT
VIEW AMERICAN EXPRESS DISCLOSURES AND PRIVACY STATEMENT COPYRIGHT © 2000 AMERICAN EXPRESS COMPANY
SEARCH FAVORITES HISTORY CHANNELS FULLSCREEN MAIL PRINT EDIT LINKS
ONLINE MERCHANT PAYMENT WEBSITE
FINANCE NEWS SHOPPING
2b
ORMATION:
CERTIFICATE OR COUPON
2. ENTER CREDIT CARD INFORMATION
EMED A GIFT CERTIFICATE OR RETURN HERE TO ENTER NFORMATION OR TO PLACE
YOUR ORDER.
CARD TYPE: SELECT ONE:
144
CARD NUMBER:
146
EXPIRATION DATE: MONTH YEAR
148
MOST IN-STOCK ITEMS ARE DELIVERED WITHIN 3-4 BUSINESS DAYS.
PURCHASE NOW
150
INTERNET ZONE

FIG.7

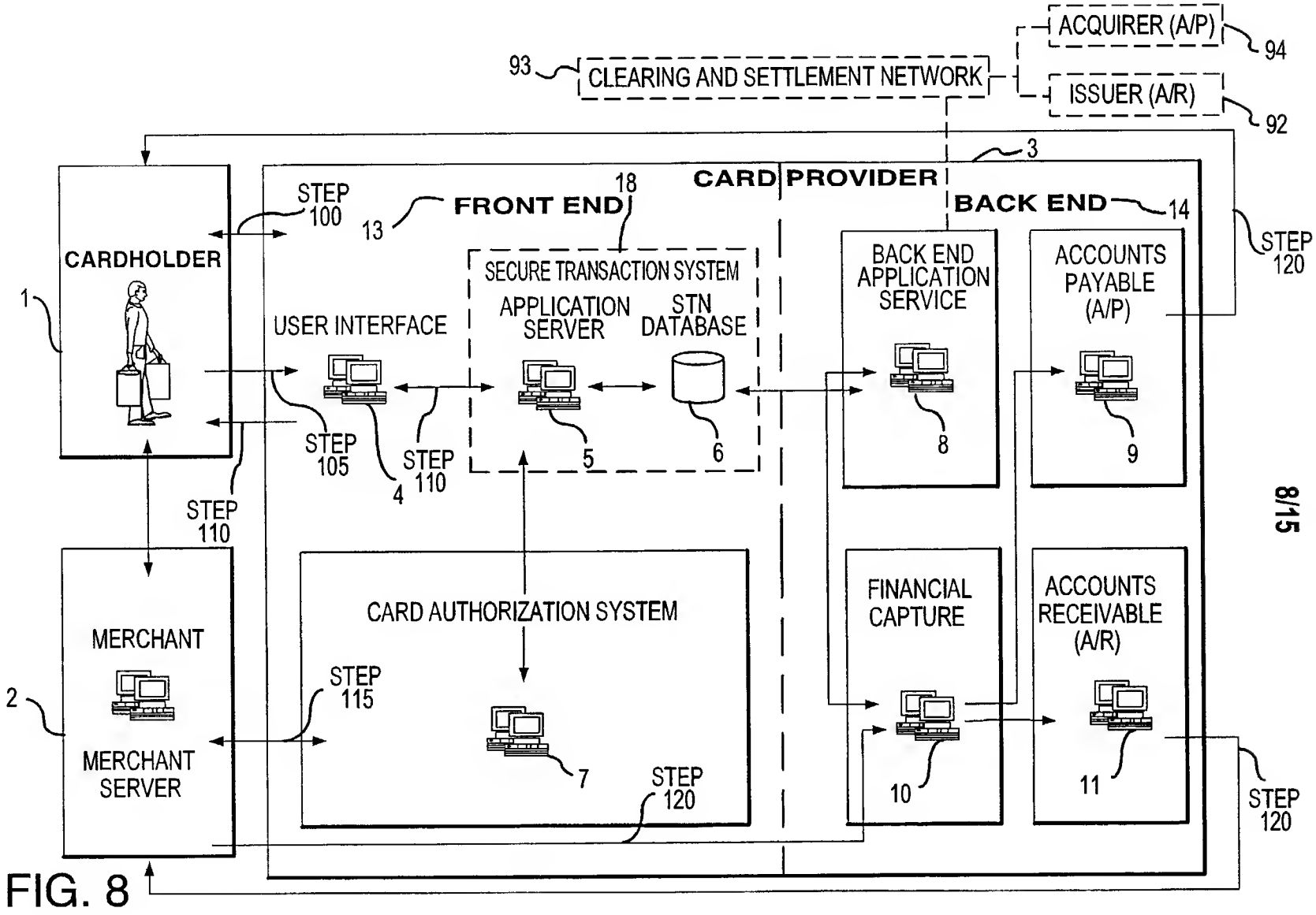
ACQUIRER (A/P)
94
93
CLEARING AND SETTLEMENT NETWORK
ISSUER (A/R)
92
3
CARD PROVIDER
CARDHOLDER
1
STEP 100
13
FRONT END
18
BACK END
14
STEP 120
SECURE TRANSACTION SYSTEM
USER INTERFACE
APPLICATION SERVER
STN DATABASE
BACK END APPLICATION SERVICE
ACCOUNTS PAYABLE (A/P)
STEP 105
STEP 110
4
5
6
8
9
STEP 110
MERCHANT
CARD AUTHORIZATION SYSTEM
FINANCIAL CAPTURE
ACCOUNTS RECEIVABLE (A/R)
2
STEP 115
MERCHANT SERVER
7
STEP 120
10
11
STEP 120

FIG. 8

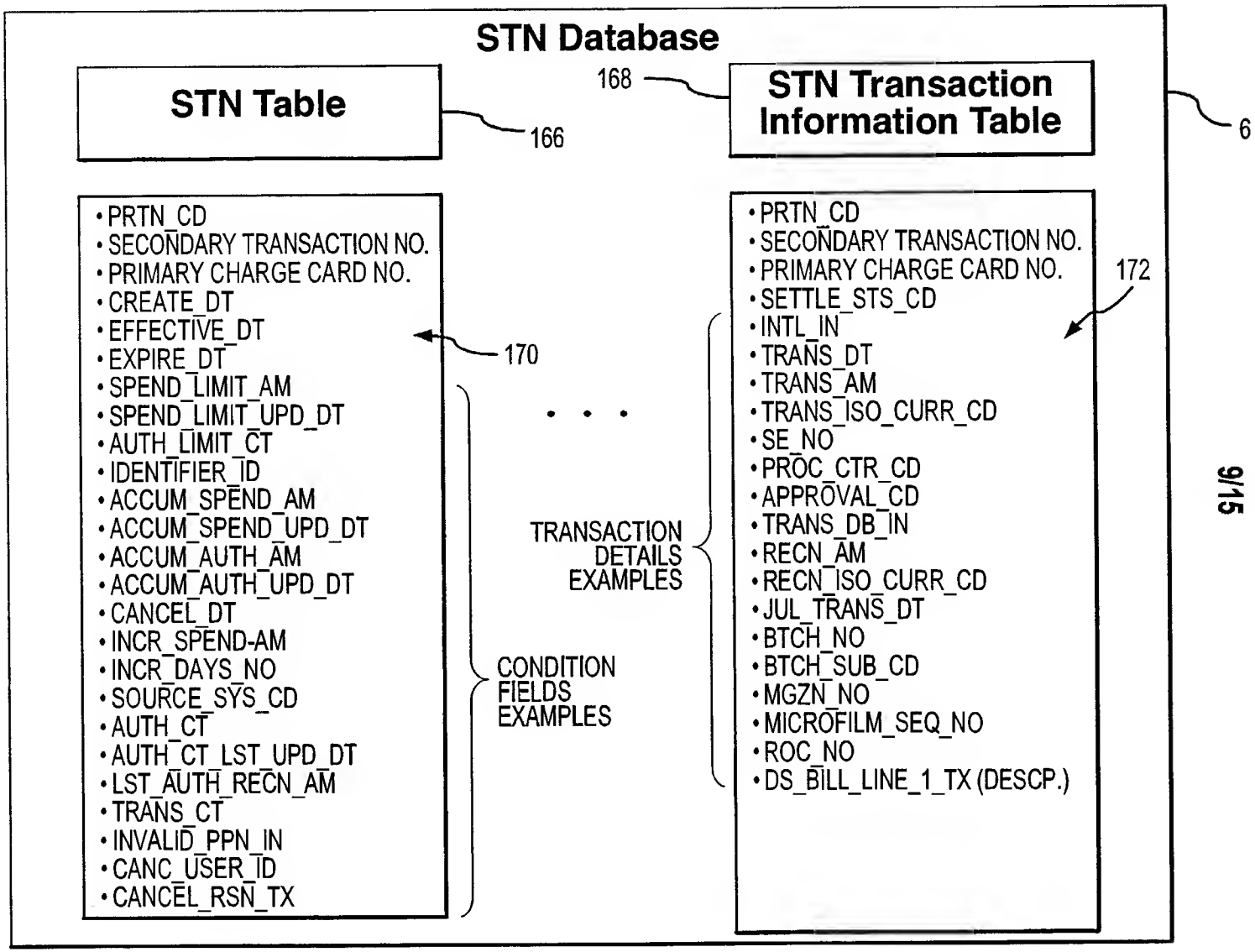
STN Database
STN Table
166
168
STN Transaction Information Table
6
• PRTN_CD
• SECONDARY TRANSACTION NO.
• PRIMARY CHARGE CARD NO.
• CREATE_DT
• EFFECTIVE_DT
• EXPIRE_DT
• SPEND_LIMIT_AM
• SPEND_LIMIT_UPD_DT
• AUTH_LIMIT_CT
• IDENTIFIER_ID
• ACCUM_SPEND_AM
• ACCUM_SPEND_UPD_DT
• ACCUM_AUTH_AM
• ACCUM_AUTH_UPD_DT
• CANCEL_DT
• INCR_SPEND-AM
• INCR_DAYS_NO
• SOURCE_SYS_CD
• AUTH_CT
• AUTH_CT_LST_UPD_DT
• LST_AUTH_RECN_AM
• TRANS_CT
• INVALID_PPN_IN
• CANC_USER_ID
• CANCEL_RSN_TX
170
CONDITION FIELDS EXAMPLES
• • •
TRANSACTION DETAILS EXAMPLES
• PRTN_CD
• SECONDARY TRANSACTION NO.
• PRIMARY CHARGE CARD NO.
• SETTLE_STS_CD
• INTL_IN
• TRANS_DT
• TRANS_AM
• TRANS_ISO_CURR_CD
• SE_NO
• PROC_CTR_CD
• APPROVAL_CD
• TRANS_DB_IN
• RECN_AM
• RECN_ISO_CURR_CD
• JUL_TRANS_DT
• BTCH_NO
• BTCH_SUB_CD
• MGZN_NO
• MICROFILM_SEQ_NO
• ROC_NO
• DS_BILL_LINE_1_TX (DESCP.)
172

FIG. 9

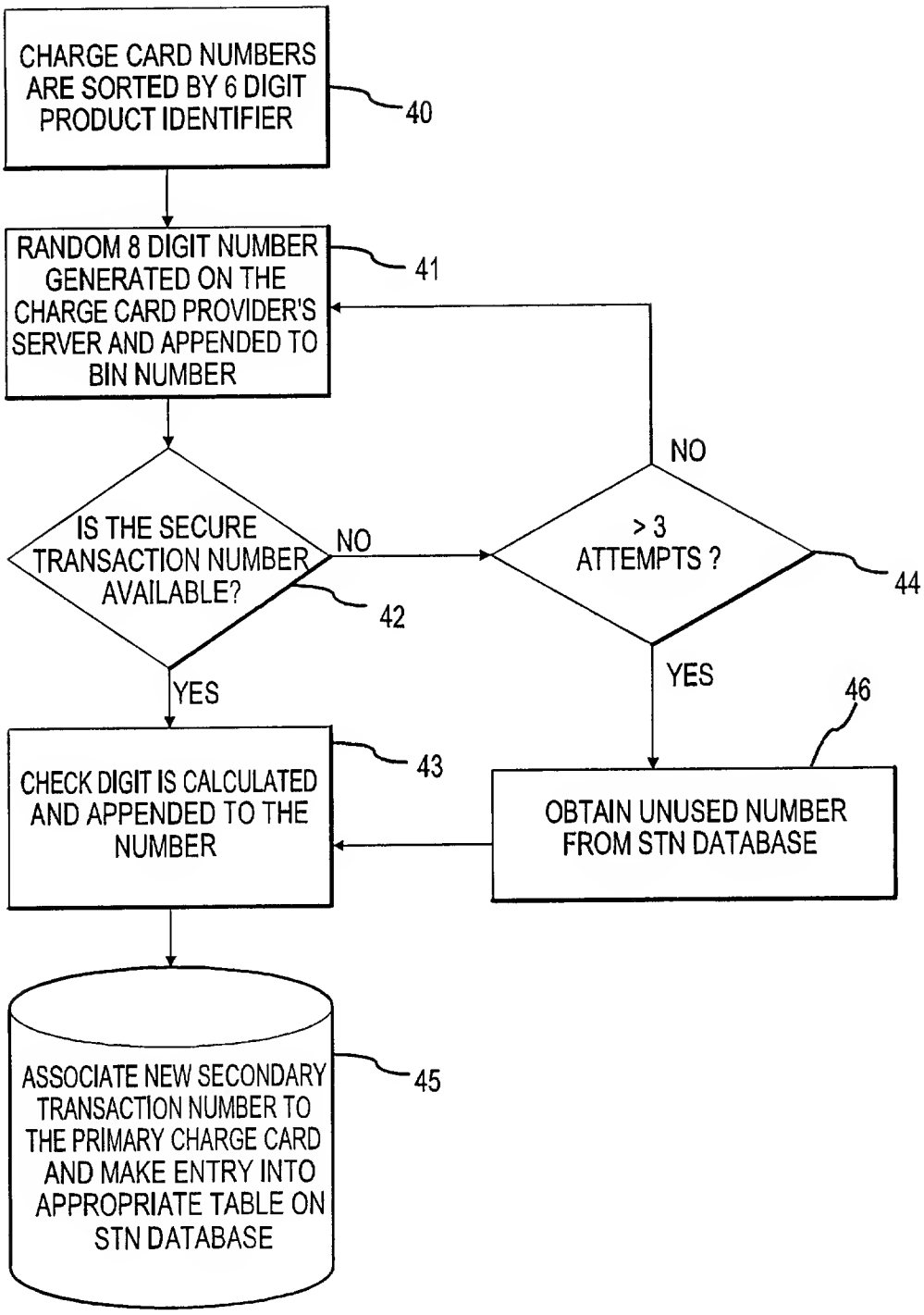
CHARGE CARD NUMBERS ARE SORTED BY 6 DIGIT PRODUCT IDENTIFIER
40
RANDOM 8 DIGIT NUMBER GENERATED ON THE CHARGE CARD PROVIDER'S SERVER AND APPENDED TO BIN NUMBER
41
IS THE SECURE TRANSACTION NUMBER AVAILABLE?
42
NO
> 3 ATTEMPTS ?
44
NO
YES
YES
CHECK DIGIT IS CALCULATED AND APPENDED TO THE NUMBER
43
OBTAIN UNUSED NUMBER FROM STN DATABASE
46
ASSOCIATE NEW SECONDARY TRANSACTION NUMBER TO THE PRIMARY CHARGE CARD AND MAKE ENTRY INTO APPROPRIATE TABLE ON STN DATABASE
45

FIG. 10

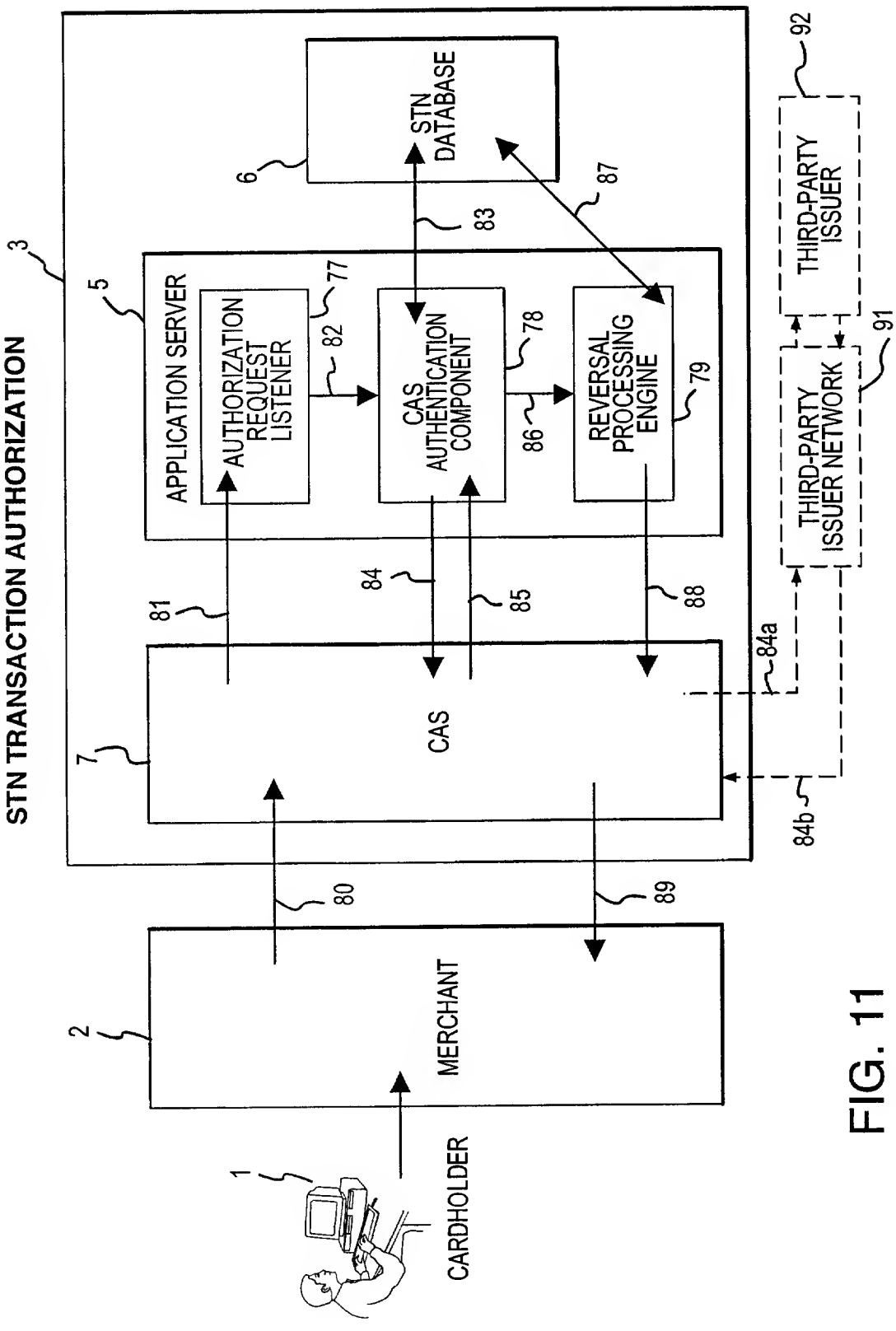
STN TRANSACTION AUTHORIZATION
3
5
APPLICATION SERVER
AUTHORIZATION REQUEST LISTENER
77
82
CAS AUTHENTICATION COMPONENT
78
86
REVERSAL PROCESSING ENGINE
79
6
STN DATABASE
83
87
92
THIRD-PARTY ISSUER
91
THIRD-PARTY ISSUER NETWORK
81
84
85
88
84a
84b
7
CAS
80
89
2
MERCHANT
1
CARDHOLDER

FIG. 11

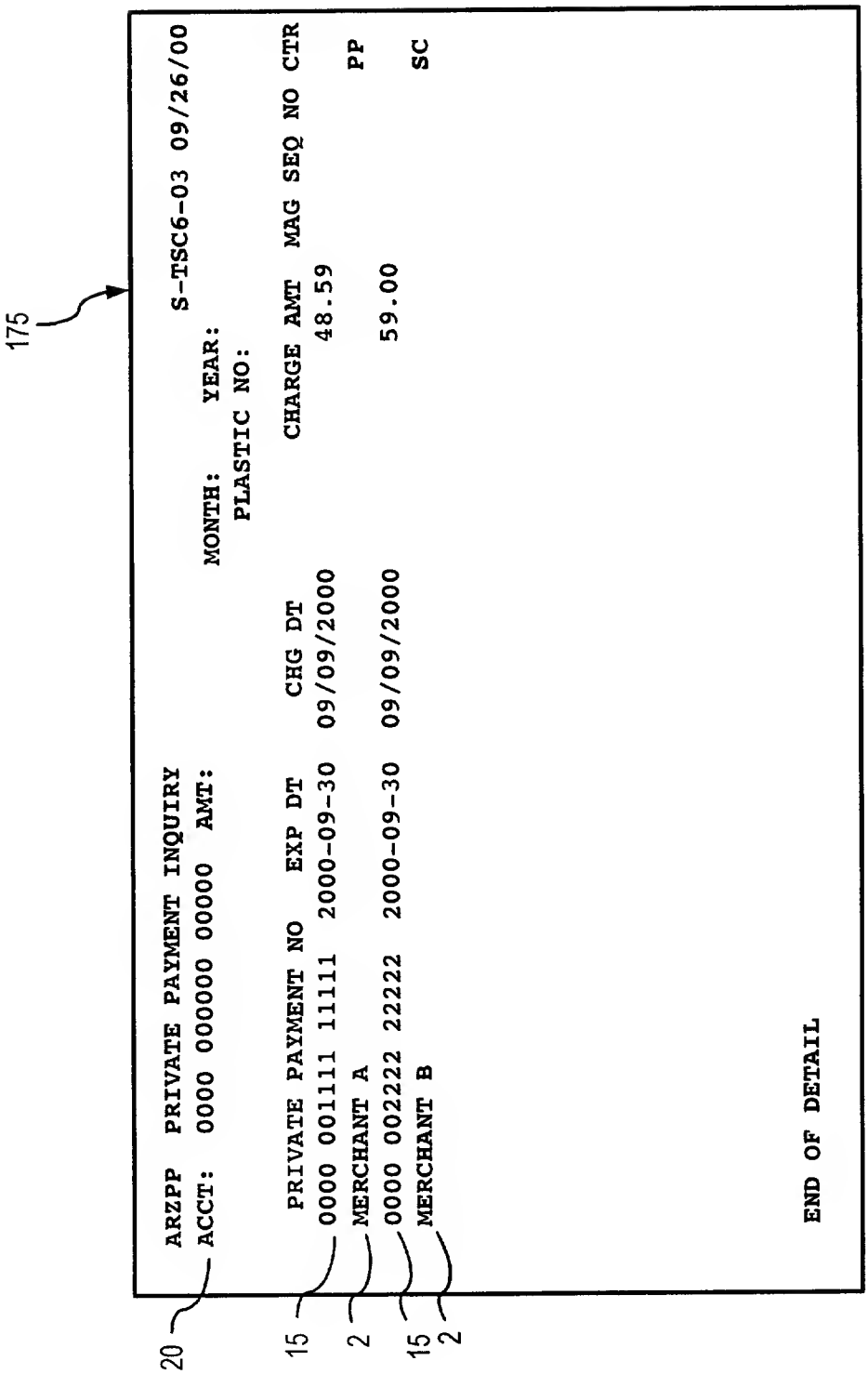
175
ARZPP PRIVATE PAYMENT INQUIRY S-TSC6-03 09/26/00
ACCT: 0000 000000 00000 AMT: MONTH: YEAR:
PLASTIC NO:
PRIVATE PAYMENT NO EXP DT CHG DT CHARGE AMT MAG SEQ NO CTR
0000 001111 11111 2000-09-30 09/09/2000 48.59
MERCHANT A PP
0000 002222 22222 2000-09-30 09/09/2000 59.00
MERCHANT B SC
END OF DETAIL
20
15
2
15
2

FIG. 12

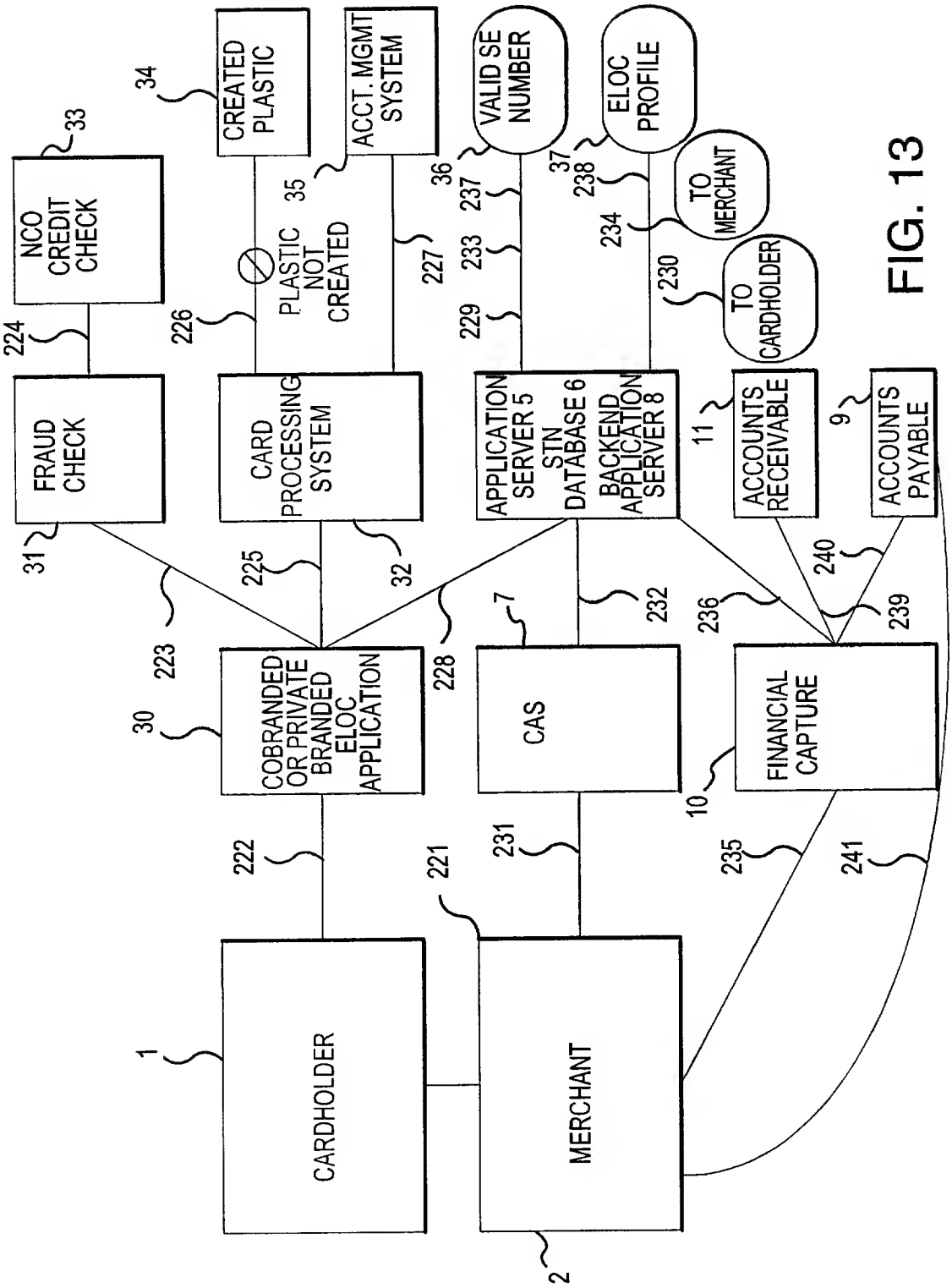
CARDHOLDER
MERCHANT
COBRANDED OR PRIVATE BRANDED ELOC APPLICATION
CAS
FINANCIAL CAPTURE
FRAUD CHECK
CARD PROCESSING SYSTEM
APPLICATION SERVER 5 STN DATABASE 6 BACKEND APPLICATION SERVER 8
ACCOUNTS RECEIVABLE
ACCOUNTS PAYABLE
NCO CREDIT CHECK
CREATED PLASTIC
PLASTIC NOT CREATED
ACCT. MGMT SYSTEM
VALID SE NUMBER
ELOC PROFILE
TO MERCHANT
TO CARDHOLDER
1
2
7
9
10
11
30
31
32
33
34
35
36
37
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241

FIG. 13

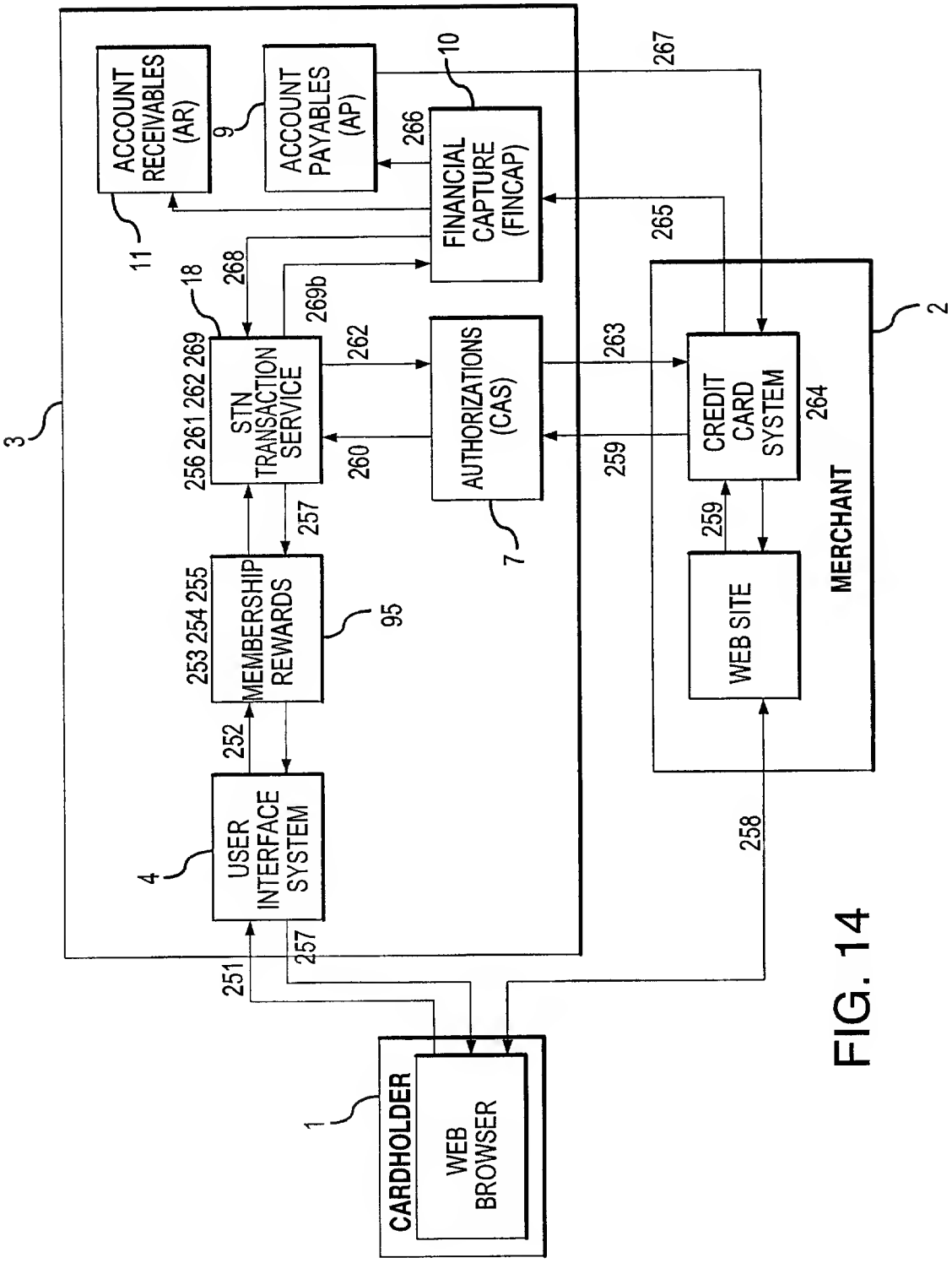
ACCOUNT RECEIVABLES (AR)
9
ACCOUNT PAYABLES (AP)
10
267
266
FINANCIAL CAPTURE (FINCAP)
11
268
18
269b
265
256 261 262 269
STN TRANSACTION SERVICE
262
AUTHORIZATIONS (CAS)
263
CREDIT CARD SYSTEM
264
2
3
260
259
257
7
259
MERCHANT
253 254 255
MEMBERSHIP REWARDS
95
WEB SITE
252
USER INTERFACE SYSTEM
4
258
257
251
CARDHOLDER
WEB BROWSER
1

FIG. 14

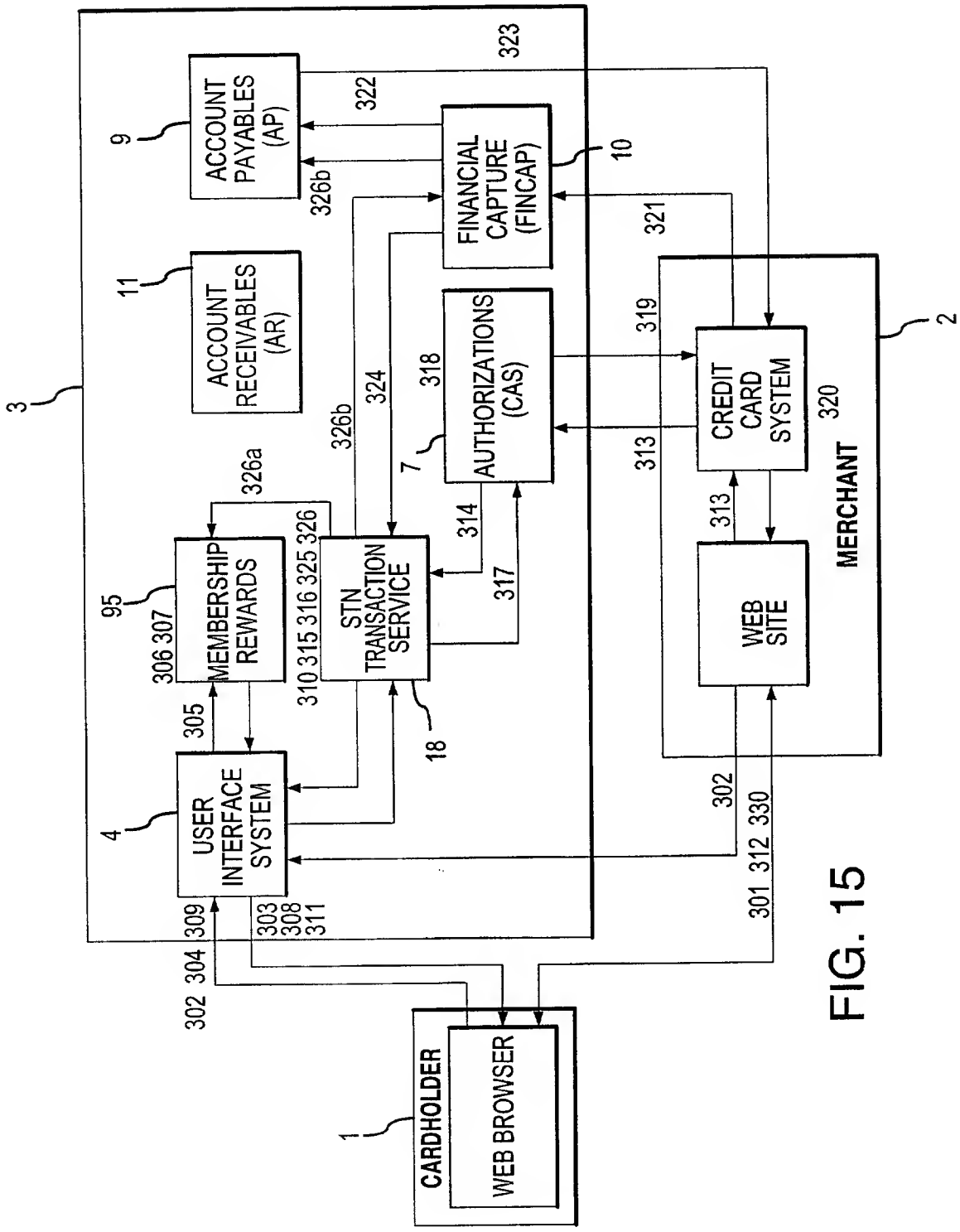
CARDHOLDER
WEB BROWSER
1
USER INTERFACE SYSTEM
4
MEMBERSHIP REWARDS
95
STN TRANSACTION SERVICE
18
AUTHORIZATIONS (CAS)
7
FINANCIAL CAPTURE (FINCAP)
10
ACCOUNT PAYABLES (AP)
9
ACCOUNT RECEIVABLES (AR)
11
3
MERCHANT
2
WEB SITE
CREDIT CARD SYSTEM
320
302
304
309
303
308
311
305
306 307
310 315 316 325 326
326a
326b
324
314
317
318
313
319
321
322
323
330
312
301

FIG. 15